

Table 1. 2003 Summary Statistics

Item	Value	U.S. Rank
California		
NERC Region(s)		WECC
Primary Energy Source		Gas
Net Summer Capability (megawatts)	57,850	2
Electric Utilities	23,223	7
Independent Power Producers & Combined Heat and Power	34,627	4
Net Generation (megawatthours)	192,788,542	4
Electric Utilities	81,728,209	13
Independent Power Producers & Combined Heat and Power	111,060,333	4
Emissions (thousand metric tons)		
Sulfur Dioxide	17	42
Nitrogen Oxide	60	31
Carbon Dioxide	55,855	16
Sulfur Dioxide (lbs/MWh)2	50
Nitrogen Oxide (lbs/MWh)7	46
Carbon Dioxide (lbs/MWh)	639	47
Total Retail Sales (megawatthours)	238,709,728	2
Full Service Provider Sales (megawatthours)	172,746,724	3
Deregulated Sales (megawatthours)	65,963,004	1
Direct Use (megawatthours)	15,183,496	3
Average Retail Price (cents/kWh)	11.62	3

See footnotes at end of tables.

Table 2. Ten Largest Plants by Generating Capability, 2003

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
California			
1. Moss Landing Power Plant	Gas	Duke Energy North America LLC	2,498
2. Diablo Canyon	Nuclear	Pacific Gas & Electric Co	2,174
3. San Onofre	Nuclear	Southern California Edison Co	2,150
4. AES Alamos LLC	Gas	AES Alamos LLC	1,987
5. Ormond Beach	Gas	Reliant Energy Ormond Bch LLC	1,516
6. Castaic	Hydro	Los Angeles City of	1,495
7. Haynes	Gas	Los Angeles City of	1,348
8. Pittsburg Power	Gas	Mirant Delta LLC	1,311
9. AES Redondo Beach LLC	Gas	AES Redondo Beach LLC	1,310
10. Helms Pumped Storage	Hydro	Pacific Gas & Electric Co	1,212

See footnotes at end of tables.

Table 3. Top Five Providers of Retail Electricity, 2003
(Megawatthours)

Entity	Ownership Type	All Sectors	Residential	Commercial	Industrial	Transportation
California						
1. Southern California Edison Co.....	Investor-Owned	52,229,092	21,319,622	25,574,334	5,290,058	45,078
2. Pacific Gas & Electric Co.....	Investor-Owned	47,881,180	19,460,983	22,134,150	6,286,047	0
3. Electric Fund (CDWR).....	Power Marketer	42,268,207	15,102,091	20,819,775	6,333,470	12,871
4. Los Angeles City of.....	Public	23,040,163	7,792,453	12,640,270	2,476,441	130,999
5. San Diego Gas & Electric Co.....	Investor-Owned	10,048,511	4,476,343	4,244,814	1,231,354	96,000
Total Sales, Top Five Providers.....		175,467,153	68,151,492	85,413,343	21,617,370	284,948
Percent of Total State Sales.....		74	84	79	44	35

See footnotes at end of tables.

Table 4. Electric Power Industry Net Summer Capability by Primary Energy Source, 1994, 1998, and 2003
(Megawatts)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
California							
Electric Utilities.....	43,297	30,663	23,223	-6.7	81.0	58.5	40.1
Petroleum.....	558	395	185	-11.5	1.0	.8	.3
Natural Gas.....	16,926	6,510	1,654	-22.8	31.7	12.4	2.9
Dual Fired.....	6,277	4,413	3,500	-6.3	11.7	8.4	6.0
Nuclear.....	4,310	4,310	4,324	*	8.1	8.2	7.5
Hydroelectric.....	9,773	9,780	9,716	-1	18.3	18.7	16.8
Other Renewables.....	1,723	1,525	156	-23.4	3.2	2.9	.3
Pumped Storage.....	3,730	3,730	3,688	-1	7.0	7.1	6.4
Independent Power Producers and Combined							
Heat and Power.....	10,158	21,712	34,627	14.6	19.0	41.5	59.9
Coal.....	421	381	357	-1.8	.8	.7	.6
Petroleum.....	48	191	507	29.9	.1	.4	.9
Natural Gas.....	3,778	13,083	26,084	23.9	7.1	25.0	45.1
Other Gases.....	220	203	225	.3	.4	.4	.4
Dual Fired.....	925	3,473	2,184	10.0	1.7	6.6	3.8
Hydroelectric.....	643	476	232	-10.7	1.2	.9	.4
Other Renewables.....	4,114	3,896	5,021	2.2	7.7	7.4	8.7
Other.....	9	9	17	7.3	*	*	*
Total Electric Industry.....	53,457	52,374	57,850	.9	100.0	100.0	100.0
Coal.....	421	381	358	-1.8	.8	.7	.6
Petroleum.....	607	586	692	1.5	1.1	1.1	1.2
Natural Gas.....	20,705	19,592	27,738	3.3	38.7	37.4	47.9
Other Gases.....	220	203	225	.3	.4	.4	.4
Dual Fired.....	7,202	7,885	5,684	-2.6	13.5	15.1	9.8
Nuclear.....	4,310	4,310	4,324	*	8.1	8.2	7.5
Hydroelectric.....	10,416	10,256	9,947	-5	19.5	19.6	17.2
Other Renewables.....	5,837	5,422	5,177	-1.3	10.9	10.4	8.9
Pumped Storage.....	3,730	3,730	3,688	-1	7.0	7.1	6.4
Other.....	9	9	17	7.3	*	*	*

See footnotes at end of tables.

Table 5. Electric Power Industry Generation by Primary Energy Source, 1994, 1998, and 2003
(Megawatthours)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
California							
Electric Utilities.....	126,749,186	114,926,213	81,728,209	-4.8	68.1	60.6	42.4
Petroleum.....	1,862,719	121,385	50,996	-33.0	1.0	.1	*
Natural Gas.....	61,530,357	26,385,452	9,873,371	-18.4	33.0	13.9	5.1
Nuclear.....	33,752,237	34,594,206	35,593,789	.6	18.1	18.2	18.5
Hydroelectric.....	21,917,229	47,475,341	35,782,738	5.6	11.8	25.0	18.6
Other Renewables.....	6,751,795	5,141,028	1,339,627	-16.4	3.6	2.7	.7
Pumped Storage.....	934,849	1,208,801	-912,313	NM	.5	.6	-5
Independent Power Producers and Combined							
Heat and Power.....	59,442,805	74,674,493	111,060,334	7.2	31.9	39.4	57.6
Coal.....	3,271,691	2,159,070	2,326,305	-3.7	1.8	1.1	1.2
Petroleum.....	1,548,422	2,091,687	2,341,252	4.7	.8	1.1	1.2
Natural Gas.....	32,901,443	48,746,540	81,558,810	10.6	17.7	25.7	42.3
Other Gases.....	2,959,314	3,076,556	1,759,015	-5.6	1.6	1.6	.9
Hydroelectric.....	1,095,386	2,072,859	587,965	-6.7	.6	1.1	.3
Other Renewables.....	17,652,424	16,507,556	22,442,789	2.7	9.5	8.7	11.6
Other.....	14,125	20,225	44,198	13.5	*	*	*
Total Electric Industry.....	186,191,991	189,600,706	192,788,542	.4	100.0	100.0	100.0
Coal.....	3,271,691	2,159,070	2,326,305	-3.7	1.8	1.1	1.2
Petroleum.....	3,411,141	2,213,072	2,392,248	-3.9	1.8	1.2	1.2
Natural Gas.....	94,431,800	75,131,992	91,432,181	-4	50.7	39.6	47.4
Other Gases.....	2,959,314	3,076,556	1,759,015	-5.6	1.6	1.6	.9
Nuclear.....	33,752,237	34,594,206	35,593,789	.6	18.1	18.2	18.5
Hydroelectric.....	23,012,615	49,548,200	36,370,703	5.2	12.4	26.1	18.9
Other Renewables.....	24,404,219	21,648,584	23,782,416	-3	13.1	11.4	12.3
Pumped Storage.....	934,849	1,208,801	-912,313	NM	.5	.6	-5
Other.....	14,125	20,225	44,198	13.5	*	*	*

See footnotes at end of tables.

Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1994, 1998, and 2003

Fuel, Quality	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
California				
Coal (cents per million Btu).....	0.0	0.0	172.7	NM
Average heat value (Btu per pound).....	0	0	11,943	NM
Average sulfur Content (percent).....	.0	.0	.7	NM
Petroleum (cents per million Btu).....	216.3	274.7	266.5	2.3
Average heat value (Btu per gallon).....	146,100	144,857	124,229	-1.8
Average sulfur Content (percent).....	.4	.0	.9	10.5
Natural Gas (cents per million Btu).....	248.4	268.6	536.7	8.9
Average heat value (Btu per cubic foot).....	1,029	1,021	1,025	*

See footnotes at end of tables.

Table 7. Electric Power Industry Emissions Estimates, 1994, 1998, and 2003
(Thousand Metric Tons)

Emission Type	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
California				
Sulfur Dioxide				
Coal	25	16	3	-21.9
Petroleum	47	52	13	-13.2
Natural Gas	*	*	*	-.1
Other	1	3	1	*
Total	73	71	17	-14.8
Nitrogen Oxide				
Coal	17	13	5	-12.8
Petroleum	8	8	7	-1.5
Gas	74	55	43	-5.8
Other	10	14	5	-7.1
Total	108	89	60	-6.4
Carbon Dioxide				
Coal	4,728	3,580	3,851	-2.3
Petroleum	3,668	3,012	2,988	-2.3
Gas	53,249	45,644	48,319	-1.1
Geothermal	351	330	330	-.7
Other	93	90	366	16.4
Total	62,089	52,656	55,855	-1.2

See footnotes at end of tables.

Table 8. Retail Sales, Revenue, and Average Retail Price by Sector, 1994, 1998, and 2003

Sector	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
California							
Retail Sales (thousand megawatthours)							
Residential.....	68,866	75,205	80,699	1.8	32.2	31.8	33.8
Commercial.....	76,925	92,517	108,049	3.8	36.0	39.1	45.3
Industrial.....	59,864	61,641	49,153	-2.2	28.0	26.1	20.6
Other.....	8,030	7,071	NA	NM	3.8	3.0	NA
Transportation.....	NA	NA	809	NM	NA	NA	.3
Total.....	213,684	236,434	238,710	1.2	100.0	100.0	100.0
Retail Revenue (million dollars)							
Residential.....	7,869	7,964	9,686	2.3	37.6	37.7	34.9
Commercial.....	8,383	8,782	13,167	5.1	40.1	41.6	47.5
Industrial.....	4,246	4,001	4,840	1.5	20.3	19.0	17.4
Other.....	401	358	NA	NM	1.9	1.7	NA
Transportation.....	NA	NA	48	NM	NA	NA	.2
Total.....	20,900	21,105	27,741	3.2	100.0	100.0	100.0
Average Retail Price (cents/kWh)							
Residential.....	11.43	10.60	12.00	.5	NA	NA	NA
Commercial.....	10.90	9.66	12.19	1.3	NA	NA	NA
Industrial.....	7.09	6.59	9.85	3.7	NA	NA	NA
Other.....	5.00	5.06	NA	NM	NA	NA	NA
Transportation.....	NA	NA	5.88	NM	NA	NA	NA
Total.....	9.78	9.03	11.62	1.9	NA	NA	NA

See footnotes at end of tables.

Table 9. Retail Electricity Sales Statistics, 2003

Item	Full Service Providers					Other Providers		Total
	Investor-Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	
California								
Number of Entities.....	6	35	1	4	22	14	4	86
Number of Retail Customers.....	10,788,096	3,128,465	48	14,659	25	68,164	NA	13,999,457
Retail Sales (thousand megawatthours)	111,655	57,361	1,790	256	1,684	65,963	NA	238,710
Percentage of Retail Sales	46.77	24.03	.75	.11	.71	27.63	NA	100.00
Revenue from Retail Sales (million dollars)	14,931	5,453	41	22	117	4,907	2,270	27,741
Percentage of Revenue.....	53.82	19.66	.15	.08	.42	17.69	8.18	100.00
Average Retail Price (cents/kWh).....	13.37	9.51	2.28	8.73	6.97	7.44	3.44	11.62

Table 9 Notes: Data are shown for All Sectors. **Full Service Providers** sell bundled electricity services (e.g., both energy and delivery) to end users. Full Service Providers may purchase electricity from others (such as Independent Power Producers or other full service providers) prior to delivery. **Other Providers** sell either the energy or the delivery services, but not both. Sales volumes and customer counts shown for Other Providers refer to delivered electricity, which is a joint activity of both energy and delivery providers; for clarity, they are reported only in the Energy column in this table. The revenue shown under Other Providers represents the revenue realized from the sale of the energy and the delivery services distinctly. "Public" entities include municipalities, State power agencies, and municipal marketing authorities. "Federal" entities are either owned or financed by the Federal Government. "Cooperatives" are electric utilities legally established to be owned by and operated for the benefit of those using its service. The cooperative will generate, transmit, and/or distribute supplies of electric energy to a specified area not being serviced by another utility. "Facility" sales represent direct electricity transactions from independent generators to end use consumers.

Other Notes: NA = Not applicable; NM = Not meaningful;

W = Withheld to avoid disclosure of individual company data;

* = Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is '1' and values under 0.5 are shown as '*').

Totals may not equal sum of components because of independent rounding;

Table 4 "Other Renewables" includes generation from municipal solid waste; Table 7 "Other" includes emissions from municipal solid waste.

Direct Use is commercial or industrial use of electricity that 1) is self-generated, 2) is produced by either the same entity that consumes the power or an affiliate, and 3) is used in direct support of a service or industrial process located within the same facility or group of facilities that houses the generating equipment. Direct use is exclusive of station use.